

Patent Abstracts of Japan

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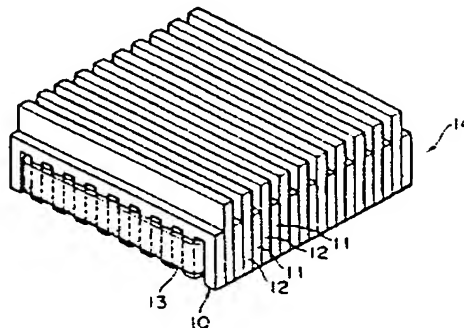
APPLICATION DATE : 29-05-86  
APPLICATION NUMBER : 61124255

APPLICANT : SHINKO ELECTRIC CO LTD;

INVENTOR : MATSUMOTO TSUYOSHI;

INT.CL. : H02K 41/025

TITLE : PRIMARY SIDE COOLING  
STRUCTURE FOR LINEAR INDUCTION  
MOTOR



ABSTRACT : PURPOSE: To increase a heat dissipation area of a core and improve a heat dissipation efficiency by forming a portion of said core excepting its coil winding side into a sinking comb-like shape through alternately laminating core plates with long dimensions and those with dimensions shorter than the former.

CONSTITUTION: A core 10 is formed by lamination of a plurality of core plates 11 and 12 respectively having teeth and grooves and a coil 13 is wound around grooves of said core 10 to form a linear induction motor (LIM) primary side 14. There are prepared two kinds of core plates 11, 12, that is, short core plates ensuring functionally required minimum dimensions and core plates with long dimensions made larger than the former plates in the portion other than a coil winding portion positioned particularly on the back side and said long and short core plates are arranged alternately for lamination. Accordingly, the portion excepting a coil winding side of the core 10 is formed into a sinking comb-like shape so as to fulfill the function of a cooling fin.

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PUBLICATION NUMBER : 2000338173  
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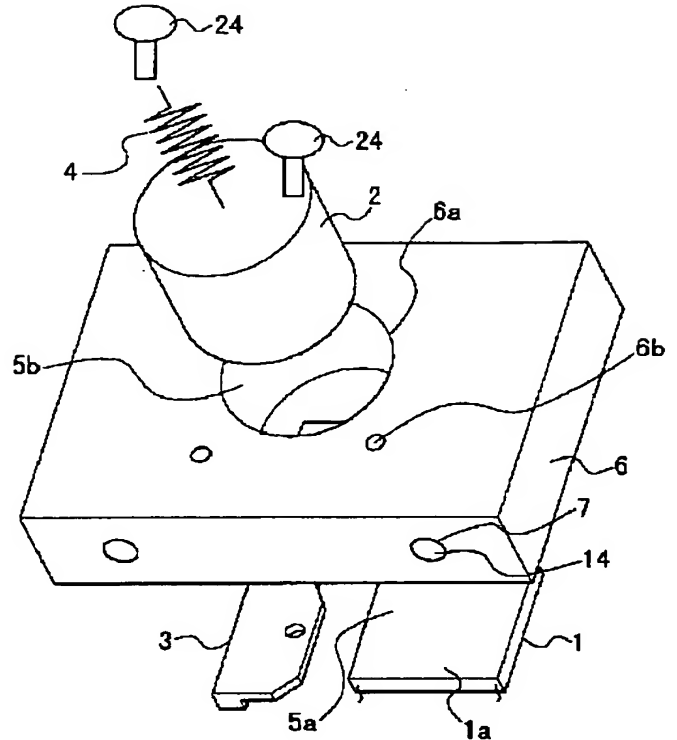
APPLICATION DATE : 28-05-99  
APPLICATION NUMBER : 11150230

APPLICANT : ANDO ELECTRIC CO LTD;

INVENTOR : TABATA FUMIO;

INT.CL. : G01R 31/26 H01L 21/66 H01L 23/473  
H05K 7/20

TITLE : IC COOLER



ABSTRACT : PROBLEM TO BE SOLVED: To efficiently cool an IC by reducing constitutive members required for heat radiation to restrain generation of stress and deflection.

SOLUTION: This IC cooler is composed of an IC 1, a heat transfer strut 2, a fixing spacer 3, a spring 4, a cooling block 6, cooling pipes 7 and screws 24. A heat-conductive material 5a is applied on a package part 1a in an upper face of the IC 1, and a heat-conductive material 5b is applied also onto a contact face contacting with the strut 2 in an insertion hole 6a for the strut 2 provided in the cooling block 6. The block 6 is fixed to a printed circuit board by the fixing spacer 3, the spring 4 is attached to the cooling block 6 by the two screws 24, 24 and tapped holes 6b provided in two portions in an upper face of the block 6, and is fixed to press an upper face of the heat transfer strut 2 downwards by spring pressure.

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